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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/714,554	11/17/2000	Kunihiro Nunomura	ASA-947	5483

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ALEXANDRIA, VA 22314

EXAMINER

KAPADIA, VARSHA A

ART UNIT

PAPER NUMBER

2651

DATE MAILED: 05/28/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/714,554

Applicant(s)

NUNOMURA ET AL.

Examiner

Varsha A Kapadia

Art Unit

2651

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on March 18, 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,4 and 8-11 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,4 and 8-11 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

This office action is responsive to the amendment filed on March 18, 2004.

**Rejection Under 35 U.S.C. 103**

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 4 and 8-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ito (US 2002/0144186 A1) in view of Yada et al (6,697,958)

With regards to claim 4, Ito discloses a magnetic disk drive (fig.1 element 2) comprising:

A magnetic disk recorder for holding data in a plurality of data units (see fig.7 element 2); a first connection interface...; a control unit controlling the drive to execute a request from the host system, and a second interface as claimed (See figs. 1 and 2 and detailed description thereof); a first function of reproducing data units according to request (see fig. 10 S30 and fig.5); a third function ...indicating presence or absence of an error for each data unit (see fig. 5 element S1, fig.10 and disclosure) ; a fourth function of outputting a portion of reproduced data, remains of data and the error information in a serial manner (see fig. 10 element S31, fig.11 and disclosure thereof).

Ito further discloses function of retries but fails to disclose the function of limiting number of retries so that data can be transferred within a specified necessary time as recited in the claim.

Yada et al however, discloses such a capability (see for example abstract, co.13 line 45- col.14 line 14, col.11 line 40 to col.12 line 44 figs. 1, 5-7 and disclosure thereof).

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It would have been obvious to one of ordinary skill in the art at the time this invention was made to modify the disclosure of Ito with the above teaching from Yada et al in order to provide a disk drive having a technique of executing retries of various operations within a period of time which allows the disk drive to continuously record/reproduce data while maintaining the data quality and reliability of the disk drive (see col.2 lines 36-41).

With regards to limitation recited in claim 10, see fig.11 and disclosure thereof in Ito; wherein continuous data transfer in a specified format is considered to be in serial manner.

With regards to claim 11, Ito discloses that the error information is a bit map (considered as block address along with number of bytes) see fig.7 and paragraph [0088] for example in Ito.

Claims 1 and 8-9 are drawn to the method of using the corresponding apparatus recited in claims 4 and 10-11 respectively. Therefore method claims 1 and 8-9 corresponds to apparatus claims 4 and 10-11 and are rejected for the same reasons of obviousness as used above.

#### **Response to Remarks**

Applicant's arguments with respect to claims 1, 4 and 8-11 have been considered but are moot in view of the new ground(s) of rejection.

#### **Prior Art Cited**

Reference to Arai (6,122,235) cited as of interest.

Reference to Sato et al (US 2001/0016884 A1) cited as of interest.

Reference to Igari et al (6,523,142) cited as of interest.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Varsha A Kapadia whose telephone number is (703) 305-4198. The examiner can normally be reached on Mon-Wed from 6:30 AM to 2:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David R. Hudspeth can be reached on (703) 308-4825. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



VK



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